AMENDMENTS TO THE SPECIFICATION

Please amend the following paragraphs of the specification corresponding to published application US 2004/0234946 A1 as follows:

[0045] To assess sperm motility, the right vas deferens may be surgically removed to minimize blood contamination. After excising tissue from the separated vas deferens, the tissue may be immediately placed into a pre-warmed suspension medium containing a chemical solution, as would be known to one of ordinary skill in the art. After a "swim-out" period in which sperm are allowed to enter the medium, a cannula can be inserted into the medium to obtain a sample. The cannula can then be inserted into the retractable stage of the ~~Hamilton-Thorne integrated visual optics system (IVOS) sperm analyzer~~ HAMILTON THORNE INTEGRATED VISUAL OPTICS SYSTEM (IVOS®) SPERM ANALYZER, for a general examination of sperm on the analyzer's monitor. One of ordinary skill in the art would recognize that additional steps would be undertaken to complete the sperm analysis.

[0046] To assess sperm count, an epididymis (for example, the left epididymis) of the rodents may be removed. For example, a ~~Hamilton-Thorne integrated visual optics system (IVOS) sperm analyzer~~ HAMILTON THORNE INTEGRATED VISUAL OPTICS SYSTEM (IVOS®) SPERM ANALYZER may be employed to conduct this type of sperm assessment, as would be known to one skilled in the art.

[0056] Target animals (i.e., adult male White-footed mice and Meadow voles) were transported in their traps on the day following capture to the field laboratory. Target animals were euthanized with carbon dioxide, and liver weights were first recorded. For the assessment of sperm motility, the right vas deferens was surgically removed with care to minimize blood contamination. The excised tissue was immediately placed into a

pre-warmed suspension medium containing 3 ml of phosphate buffered saline with 1% bovine serum albumin, and given a 3-minute "swim-out" period to allow sperm to enter the medium. A 100 mm cannula was then inserted into the medium to obtain a sample, and the cannula inserted into the retractable stage of a ~~Hamilton-Thorne integrated visual optics system (IVOS) sperm analyzer~~ HAMILTON THORNE INTEGRATED VISUAL OPTICS SYSTEM (IVOS®) SPERM ANALYZER, for a general examination of sperm on the analyzer's main unit color monitor. The analyzer was preset to automatically move the stage to five different fields along the length of the cannula and to store each motion image (uniquely identified by study number, animal number, and cannula field number) on a write once optical disk, creating a permanent record for precise image reproduction and retrieval. Several weeks later, each image was recalled from the optical disk and analyzed for motile and non-motile cells.

[0072] To evaluate sperm motility, following the dispersal period, a 9 µL sperm sample was obtained from the petri dish and loaded into a 20 µM deep Cell-Vu chamber. The chamber was cover slipped and immediately loaded onto the prewarmed stage of the ~~Hamilton-Thorne IVOS automated sperm analyzer~~ HAMILTON THORNE IVOS® AUTOMATED SPERM ANALYZER. Five fields were automatically selected by the analyzer and each motion image was recorded and stored digitally. The images were subsequently analyzed for percent motility. The percent progressive motility and the sperm motion parameters listed in Table 3 (below) were also obtained for each animal. The images were permanently stored to optical media.